



# STIC Search Report

## Biotech-Chem Library

STIC Database Tracking Number: 149925

**TO: Nita M Minnifield**  
**Location: REM-3C01&3C18**  
**Art Unit: 1645**  
**Wednesday, April 06, 2005**

**Case Serial Number: 09/390846**

**From: Deirdre Arnold**  
**Location: Biotech-Chem Library**  
**REM 1A64**  
**Phone: 571-272-2532**

**Deirdre.Arnold@uspto.gov**

### Search Notes

**RUSH**

*Please feel free to contact me if you have any questions or would like to amend the search.*

Thank you for using STIC services.

Regards,  
Deirdre Arnold



From: Chan, Christina  
Sent: Tuesday, April 05, 2005 12:19 PM  
To: Minnifield, Nita; STIC-Biotech/ChemLib  
Subject: RE: interference sequence search

Please rush. Thanks Chris

Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644  
(571)-272-0841  
Remsen, 3E89

-----Original Message-----

From: Minnifield, Nita  
Sent: Tuesday, April 05, 2005 11:51 AM  
To: Chan, Christina  
Subject: interference sequence search

CRFE

Christina, please approve, 2 month amdt.

STIC

09/390846

Please do an interference sequence search on SEQ ID NO: 2 of the above application.

Please provide a paper copy of the results.

Thanks,  
Minnifield  
71976  
Art Unit 1645  
Office REM-3C01

\*\*\*\*\*

STAFF USE ONLY

Searcher: Arnold  
Searcher Phone: 2- 2532  
Date Searcher Picked up: 4/15/05  
Date Completed: 4/16/05  
Searcher Prep/Rev. Time:         
Online Time:       

\*\*\*\*\*

Type of Search

NA#:        AA#: 1  
Interference:        SPDI:         
S/L:        Oligomer:         
Encode/Transl:         
Structure#:        Text:         
Inventor:        Litigation:       

\*\*\*\*\*

Vendors and cost where applicable

STN:         
DIALOG:         
QUESTEL/ORBIT:         
LEXIS/NEXIS:         
SEQUENCE SYSTEM:         
WWW/Internet:         
Other(Specify):

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 5, 2005, 21:34:56 ; Search time 43 Seconds  
(without alignments)  
572.888 Million cell updates/sec

Title: US-09-390-846-2

Perfect score: 1688  
Sequence: 1 MAVEKNTKTRPKIAMVSGMT.....GSIDEVKEKQKAIAPLADSK 330

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

Issued Patents AA: \*  
1: /cgn2\_6/prodata/1/iaa/5A\_COMB.pep.\*  
2: /cgn2\_6/prodata/1/iaa/5B\_COMB.pep.\*  
3: /cgn2\_6/prodata/1/iaa/6A\_COMB.pep.\*  
4: /cgn2\_6/prodata/1/iaa/6B\_COMB.pep.\*  
5: /cgn2\_6/prodata/1/iaa/PCITUS\_COMB.pep.\*  
6: /cgn2\_6/prodata/1/iaa/bckfile1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description         |
|------------|-------|-------------|--------|-------|---------------------|
| 1          | 1688  | 100.0       | 330    | 3     | US-08-676-882-2     |
| 2          | 828   | 49.1        | 315    | 5     | PCT-USA-03796-2     |
| 3          | 706   | 41.8        | 329    | 1     | US-08-270-0138-2    |
| 4          | 706   | 41.8        | 329    | 1     | US-08-838-418-2     |
| 5          | 694   | 41.1        | 325    | 4     | US-09-902-540-13486 |
| 6          | 641   | 38.0        | 324    | 4     | US-09-134-001C-5533 |
| 7          | 464   | 27.5        | 324    | 4     | US-09-107-532A-6486 |
| 8          | 426   | 25.2        | 318    | 4     | US-09-134-000C-4417 |
| 9          | 412   | 24.4        | 317    | 1     | US-08-748-068-3     |
| 10         | 412   | 24.4        | 317    | 1     | US-08-748-068-3     |
| 11         | 406   | 24.1        | 354    | 4     | US-09-949-016-8002  |
| 12         | 405   | 24.0        | 351    | 4     | US-09-949-016-11252 |
| 13         | 405   | 24.0        | 351    | 4     | US-09-949-016-11253 |
| 14         | 401.5 | 23.8        | 322    | 4     | US-09-710-279-1412  |
| 15         | 401.5 | 23.8        | 322    | 4     | US-09-710-279-1412  |
| 16         | 401.5 | 23.8        | 322    | 4     | US-09-710-279-1412  |
| 17         | 395.5 | 23.4        | 307    | 4     | US-09-107-532A-4274 |
| 18         | 391   | 23.2        | 333    | 3     | US-08-869-506-2     |
| 19         | 391   | 23.2        | 333    | 3     | US-09-128-967-2     |
| 20         | 390   | 23.1        | 333    | 3     | US-08-869-506-3     |
| 21         | 389   | 23.0        | 333    | 3     | US-09-128-967-3     |
| 22         | 389   | 23.0        | 331    | 4     | US-09-711-681-4     |
| 23         | 389   | 23.0        | 331    | 4     | US-10-274-266-4     |
| 24         | 388   | 23.0        | 331    | 4     | US-09-107-433-4752  |
| 25         | 388   | 23.0        | 332    | 4     | US-09-583-110-4591  |
| 26         | 377.5 | 22.4        | 327    | 1     | US-08-748-068-2     |
| 27         | 371   | 22.0        | 381    | 4     | US-09-711-681-2     |

|    |       |      |     |   |                      |                   |
|----|-------|------|-----|---|----------------------|-------------------|
| 28 | 371   | 22.0 | 381 | 4 | US-10-274-266-2      | Sequence 2, Appli |
| 29 | 363   | 21.5 | 330 | 3 | US-09-535-381-2      | Sequence 2, Appli |
| 30 | 338   | 20.0 | 317 | 4 | US-09-469-039A-9794  | Sequence 9794, Ap |
| 31 | 285.5 | 16.9 | 205 | 4 | US-09-949-016-9136   | Sequence 9136, Ap |
| 32 | 277   | 16.4 | 339 | 4 | US-09-543-681A-5827  | Sequence 5827, Ap |
| 33 | 273.5 | 16.2 | 304 | 4 | US-09-634-238-238    | Sequence 238, App |
| 34 | 246.5 | 14.6 | 338 | 3 | US-08-922-957-3      | Sequence 3, Appli |
| 35 | 240   | 14.2 | 338 | 3 | US-08-922-957-1      | Sequence 1, Appli |
| 36 | 236.5 | 14.0 | 358 | 3 | US-09-248-796A-17253 | Sequence 1, Appli |
| 37 | 231.5 | 13.7 | 258 | 3 | US-08-922-957-4      | Sequence 4, Appli |
| 38 | 225.5 | 13.4 | 262 | 4 | US-09-949-016-9135   | Sequence 9135, Ap |
| 39 | 225.5 | 13.4 | 262 | 4 | US-09-949-016-11622  | Sequence 11622, A |
| 40 | 224   | 13.3 | 333 | 4 | US-09-248-796A-17254 | Sequence 17254, A |
| 41 | 217   | 12.9 | 343 | 4 | US-09-248-796A-17252 | Sequence 17252, A |
| 42 | 212.5 | 12.6 | 322 | 4 | US-09-565-501A-112   | Sequence 112, App |
| 43 | 212.5 | 12.6 | 322 | 4 | US-09-539-206A-112   | Sequence 112, App |
| 44 | 212.5 | 12.6 | 322 | 4 | US-09-874-923-112    | Sequence 112, App |
| 45 | 207.5 | 12.3 | 298 | 4 | US-09-489-039A-13636 | Sequence 13636, A |

#### ALIGNMENTS

```
RESULT 1
US-08-676-882-2
; Sequence 2, Application US/08676882
; Patent No. 6100241
; GENERAL INFORMATION:
; APPLICANT: Kok, Jacobus Johannes
; APPLICANT: van den Boogaart, Paul
; APPLICANT: Vermeulen, Arnoldus Nicolaas
; TITLE OF INVENTION: Coccidiosis poultry vaccine
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESS: Akzo No. 6100241el Patent Department
; STREET: 1300 Piccard Drive, Suite 206
; CITY: Rockville
; STATE: Maryland
; COUNTRY: USA
; ZIP: 20850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/676, 882
; FILING DATE: 03-JUL-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Gornley, Mary E.
; REGISTRATION NUMBER: 34,409
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301) 977-0847
; TELEFAX: (301) 258-5200
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 330 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-676-882-2

Query Match 100.0%; Score 1688; DB 3; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.3e-176;
Matches 330; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 MAVEKNTKTRPKIAMVSGMTAGTAAFLCSRLRLGDVLTLPVPMMPKMGKAMDISNSV 60
Db 1 MAVEKNTKTRPKIAMVSGMTAGTAAFLCSRLRLGDVLTLPVPMMPKMGKAMDISNSV 60
Oy 61 DTGTTVGSNSYECLKAGADVITITAGITKIPGSKDEKSMRDLPLPVNIKIRREVGAIKS 120
```

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 5, 2005, 21:36:16 ; Search time 54 Seconds  
(without alignments)

2026.401 Million cell updates/sec

Title: US-09-390-846-2  
Perfect score: 1688  
Sequence: 1 MAVPEKTRPKIAMVSGMI.....GSIDEVKEKQIALADSK 330

Scoring table: BLOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 1413372 seqs, 331592847 residues

Total number of hits satisfying chosen parameters: 1413372

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database: Listing first 45 summaries

1: /cgnt2\_6/prodata/2/pubpaa/US07\_PUBCOMB.pdp.\*  
2: /cgnt2\_6/prodata/2/pubpaa/PCT\_NEW\_PUB.pdp.\*  
3: /cgnt2\_6/prodata/2/pubpaa/US06\_NEW\_PUB.pdp.\*  
4: /cgnt2\_6/prodata/2/pubpaa/US06\_PUBCOMB.pdp.\*  
5: /cgnt2\_6/prodata/2/pubpaa/US07\_PUBCOMB.pdp.\*  
6: /cgnt2\_6/prodata/2/pubpaa/PCTUS\_PUBCOMB.pdp.\*  
7: /cgnt2\_6/prodata/2/pubpaa/US08\_NEW\_PUB.pdp.\*  
8: /cgnt2\_6/prodata/2/pubpaa/US08\_PUBCOMB.pdp.\*  
9: /cgnt2\_6/prodata/2/pubpaa/US09\_PUBCOMB.pdp.\*  
10: /cgnt2\_6/prodata/2/pubpaa/US09\_PUBCOMB.pdp.\*  
11: /cgnt2\_6/prodata/2/pubpaa/US09\_PUBCOMB.pdp.\*  
12: /cgnt2\_6/prodata/2/pubpaa/US09\_PUBCOMB.pdp.\*  
13: /cgnt2\_6/prodata/2/pubpaa/US09\_PUBCOMB.pdp.\*  
14: /cgnt2\_6/prodata/2/pubpaa/US10\_PUBCOMB.pdp.\*  
15: /cgnt2\_6/prodata/2/pubpaa/US10\_PUBCOMB.pdp.\*  
16: /cgnt2\_6/prodata/2/pubpaa/US10\_PUBCOMB.pdp.\*  
17: /cgnt2\_6/prodata/2/pubpaa/US10\_PUBCOMB.pdp.\*  
18: /cgnt2\_6/prodata/2/pubpaa/US10\_PUBCOMB.pdp.\*  
19: /cgnt2\_6/prodata/2/pubpaa/US10\_PUBCOMB.pdp.\*  
20: /cgnt2\_6/prodata/2/pubpaa/US60\_NEW\_PUB.pdp.\*  
/cgnt2\_6/prodata/2/pubpaa/US60\_PUBCOMB.pdp.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

| Result No. | Score | Query Match | Length | ID                  | Description       |
|------------|-------|-------------|--------|---------------------|-------------------|
| 1          | 880.5 | 52.2        | 320    | US-10-369-493-17838 | Sequence 17838, A |
| 2          | 873.5 | 51.7        | 319    | US-10-369-493-11441 | Sequence 11441, A |
| 3          | 873.5 | 51.7        | 320    | US-10-369-493-14489 | Sequence 14489, A |
| 4          | 873.5 | 51.7        | 320    | US-10-369-493-14489 | Sequence 14489, A |
| 5          | 862.5 | 51.1        | 311    | US-10-369-493-14874 | Sequence 14874, A |
| 6          | 862.5 | 51.1        | 311    | US-10-369-493-12060 | Sequence 12060, A |
| 7          | 850.5 | 50.4        | 320    | US-10-369-493-12060 | Sequence 12060, A |
| 8          | 848.5 | 50.3        | 320    | US-10-369-493-17079 | Sequence 17079, A |
| 9          | 847.5 | 50.2        | 320    | US-10-369-493-8013  | Sequence 8013, A  |
| 10         | 740   | 43.8        | 312    | US-10-369-493-10523 | Sequence 10523, A |
| 11         | 709   | 42.0        | 314    | US-10-369-493-23237 | Sequence 23237, A |
| 12         | 697   | 41.3        | 312    | US-10-369-493-17395 | Sequence 17395, A |
| 13         | 689   | 40.8        | 285    | US-10-369-493-16518 | Sequence 16518, A |
|            |       |             | 15     | US-10-369-493-19127 | Sequence 19127, A |

|    |       |      |     |    |                     |                    |
|----|-------|------|-----|----|---------------------|--------------------|
| 14 | 672   | 39.8 | 309 | 15 | US-10-369-493-9045  | Sequence 9045, Ap  |
| 15 | 669.5 | 39.7 | 319 | 15 | US-10-369-493-13585 | Sequence 13585, A  |
| 16 | 652.5 | 38.7 | 304 | 15 | US-10-369-493-10401 | Sequence 10401, A  |
| 17 | 649.5 | 38.5 | 325 | 15 | US-10-369-493-18220 | Sequence 18220, A  |
| 18 | 635   | 37.6 | 304 | 15 | US-10-369-493-11172 | Sequence 11172, A  |
| 19 | 635   | 37.6 | 317 | 15 | US-10-369-493-19850 | Sequence 19850, A  |
| 20 | 634   | 37.6 | 324 | 15 | US-10-369-493-28824 | Sequence 28824, Ap |
| 21 | 626.5 | 37.2 | 299 | 15 | US-10-369-493-9764  | Sequence 9764, Ap  |
| 22 | 626.5 | 37.1 | 305 | 15 | US-10-369-493-10967 | Sequence 10967, A  |
| 23 | 625.5 | 37.1 | 309 | 15 | US-10-369-493-18858 | Sequence 18858, A  |
| 24 | 605.5 | 35.9 | 335 | 15 | US-10-369-493-125   | Sequence 125, Ap   |
| 25 | 569.5 | 33.7 | 334 | 15 | US-10-369-493-22856 | Sequence 22856, A  |
| 26 | 560.5 | 33.2 | 313 | 15 | US-10-369-493-14326 | Sequence 14326, A  |
| 27 | 529   | 31.3 | 197 | 15 | US-10-369-493-18330 | Sequence 18330, A  |
| 28 | 478   | 28.3 | 314 | 15 | US-10-369-493-16679 | Sequence 16679, A  |
| 29 | 462   | 27.4 | 312 | 15 | US-10-369-493-23073 | Sequence 23073, A  |
| 30 | 460   | 27.3 | 321 | 15 | US-10-369-493-16703 | Sequence 16703, A  |
| 31 | 458   | 27.1 | 312 | 15 | US-10-154-460-46    | Sequence 46, Appl  |
| 32 | 455   | 27.0 | 318 | 14 | US-10-369-493-3069  | Sequence 3069, Ap  |
| 33 | 439.5 | 26.0 | 312 | 15 | US-10-369-493-16478 | Sequence 16478, A  |
| 34 | 439   | 26.0 | 312 | 15 | US-09-971-361-3     | Sequence 3, Appl1  |
| 35 | 435   | 25.8 | 319 | 9  | US-09-971-361-9     | Sequence 9, Appl1  |
| 36 | 435   | 25.8 | 318 | 15 | US-10-369-493-9022  | Sequence 9022, Ap  |
| 37 | 425   | 25.2 | 308 | 15 | US-10-369-493-3200  | Sequence 3200, Ap  |
| 38 | 422   | 25.0 | 310 | 15 | US-10-369-493-17474 | Sequence 17474, A  |
| 39 | 411.5 | 24.4 | 302 | 15 | US-10-170-385-223   | Sequence 223, Ap   |
| 40 | 408   | 24.2 | 332 | 15 | US-10-760-644-27    | Sequence 27, Appl  |
| 41 | 408   | 24.2 | 361 | 17 | US-10-760-644-27    | Sequence 27, Appl  |
| 42 | 408   | 24.2 | 361 | 17 | US-10-760-644-27    | Sequence 27, Appl  |
| 43 | 406   | 24.1 | 333 | 16 | US-10-408-785A-1736 | Sequence 1736, Ap  |
| 44 | 406   | 24.1 | 334 | 9  | US-09-974-228-75    | Sequence 75, Appl1 |
| 45 | 406   | 24.1 | 334 | 14 | US-10-177-293-262   | Sequence 262, Ap   |

## ALIGNMENTS

RESULT 1  
US-10-369-493-17838  
Sequence 17838, Application US/10369493  
Publication No. US20030233675A1  
GENERAL INFORMATION:  
APPLICANT: Cao, Yongwei  
APPLICANT: Hinkle, Gregory J.  
APPLICANT: Slater, Steven C.  
APPLICANT: Goldman, Barry S.  
APPLICANT: Chen, Xianfeng  
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
FILE REFERENCE: 38-10(52052)B  
CURRENT FILING DATE: 2003-02-28  
PRIORITY FILING DATE: 2003-02-28  
PRIOR APPLICATION NUMBER: US 60/360,039  
NUMBER OF SEQ ID NOS: 47374  
SEQ ID NO 17838  
LENGTH: 320  
TYPE: PRT  
ORGANISM: SPHINGOMONAS  
US-10-369-493-17838

Query Match  
Best Local Similarity 52.2%; Score 880.5; DB 15; Length 320;  
Matches 173; Conservative 54; Mismatches 89; Indels 5; Gaps 1;

QY 9 RKIMVSGMIGTMAFLCSRLRGDYLFPVPMMPGKAMDISHNSVDTGTYVG 68  
DB 3 RKIMVSGMIGTMAFLCSRLRGDYLFPVPMMPGKAMDISHNSVDTGTYVG 68  
QY 69 SNSVYCLGADVITTAITIKIPGKSDKWSRMDLPVNIKIMEVGAIAISYCNAVIT 128  
DB 63 ANSYEDIAGADVCIYTAGIPKPG-----MSRDDLLKTNLGVKAVGEGIAAHADAFVI 117